

**Environmental Law in a Developing Country:
Botswana**

by

Susan E Fink

**In partial fulfilment of the requirements
for the degree of**

Master of Law

at the

University of South Africa

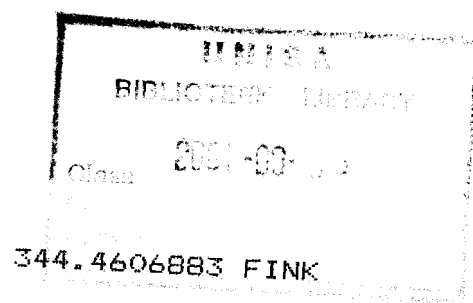
Supervisor: Prof W Bray

November 2000

Executive Summary

This paper outlines the current state of environmental legislation and administration in Botswana, identifying the various problems with that system. Those problems include fragmented and overlapping administration and out-dated legislation that is not in keeping with modern, holistic approaches to environmental management, ineffective and unreliable enforcement, compounded by rampant non-compliance. The paper then considers some the developments that are being made to improve this situation, including: the conversion of the environmental agency into a department and the introduction of an over-reaching environmental Act, preparation of a wetlands conservation strategy, the introduction of environmental impact assessment legislation. The paper concludes by querying the effectiveness of those developments when unsustainable attitudes continue to predominate in the country.

Key Terms: Environment; Legislation; Botswana; Conservation; Pollution; National Conservation Strategy; Livestock; Fragmentation; Non-compliance; Implementation; Environmental management; Environmental impact assessments; Community-Based Natural Resource Management; Environmental NGOs.



0001783043

Table of Contents

1. INTRODUCTION	1
2. THE STATE OF BOTSWANA'S ENVIRONMENT	3
2.1 WATER RESOURCES	3
2.2 WILDLIFE	4
2.3 DEPLETION OF GRASSLANDS AND VELD PRODUCTS	4
2.4 WOOD AND FOREST CONSERVATION	4
2.5 POLLUTION.....	4
3. INFLUENCES ON ENVIRONMENTAL LAW IN BOTSWANA.....	5
3.1 INTERNATIONAL CONVENTIONS	5
3.2 NGOS	5
3.3 INTERNATIONAL DONORS	7
3.4 TOURISM.....	7
3.5 INDUSTRIAL DEVELOPMENT.....	8
3.6 COMMUNITY PARTICIPATION	8
3.7 VISION 2016 AND NDP 8.....	9
3.8 LIVESTOCK.....	10
4. SUMMARY OF BOTSWANA'S ENVIRONMENTAL LEGISLATION	10
4.1 THE NATIONAL CONSERVATION STRATEGY.....	10
4.2 POLLUTION CONTROL.....	12
4.2.1 Air Pollution.....	12
4.2.2 Water Pollution.....	13
4.2.3 Waste Disposal and Pollution.....	15
4.3 CONSERVATION.....	17
4.3.1 Flora	18
4.3.2 Wildlife.....	19
4.3.3 Land Use	23
4.4 ENFORCING AUTHORITIES.....	24
5. COMMENTS ON BOTSWANA'S ENVIRONMENTAL LEGISLATION	26
5.1 THE NATIONAL CONSERVATION STRATEGY.....	26
5.2 FRAGMENTATION/OVERLAP.....	27
5.3 POOR IMPLEMENTATION/LACK OF IMPLEMENTATION.....	28
5.4 NON-COMPLIANCE	29
5.5 LACK OF ENFORCEMENT	31
5.6 ILLUSTRATION.....	32
6. ENVIRONMENTAL DEVELOPMENTS IN BOTSWANA.....	34
6.1 THE NATIONAL CONSERVATION STRATEGY ACTION PLAN.....	34
6.2 NATIONAL CONSERVATION STRATEGY ACT AND NATIONAL CONSERVATION DEPARTMENT	36
6.3 ENVIRONMENTAL IMPACT ASSESSMENT LEGISLATION	37
6.4 WETLANDS STRATEGY	38
6.5 COMMUNITY-BASED NATURAL RESOURCE MANAGEMENT	39
6.6 EXPANDED ROLE FOR NGOS.....	40
6.7 STATE OF THE ENVIRONMENT REVIEW	40
7. CONCLUSION.....	41
8. BIBLIOGRAPHY	43

Environmental Law in a Developing Country: Botswana

Susan E Fink

1. Introduction

It is generally accepted that the law is an important tool in sustainable development.¹ As such a set of comprehensive and complimentary laws is critical to the success of any country's environmental well-being. Unfortunately, Botswana's current environmental laws generally fail in this regard, as they are out-dated, ineffective, poorly administered and, not surprisingly, largely ignored.

Fortunately those laws are currently undergoing a number of fundamental changes and improvements in Botswana. These include promulgation of environmental impact assessment legislation, implementation of an environmental action plan, preparation of a wetlands conservation strategy, redrafting the land use laws that have an effect on the environment, strengthening the powers and authority of the environmental administration, etc.

In addition to these legislative changes, other extra-legal amendments are also being made to Botswana's environmental management regime, including an increase in public consultation and education, promotion of community-based resource management programmes, the eradication of poverty and improved cross-sectoral co-operation and co-ordination.

¹ S Tsaoko 'The Role of Law and Lawyers in National Development' *CILSA* (XI) (1978) 76-77.

Unfortunately the realisation of these developments is very slowly indeed. For example, since 1990 when the Government of Botswana published its National Conservation Strategy² (the Strategy) for the promotion of sustainable development, there has been almost no change to the country's environmental laws. This is true despite the fact that the Strategy stressed the need for such amendments and in spite of the decline in the condition of Botswana's environment.

It is suggested that this delay is caused by the unwillingness of both the Government and the people of Botswana to make the sacrifices necessary to promote sustainable development. The best example of this is in respect of livestock. Even though the livestock industry is responsible for many of the environmental problems facing Botswana today, neither the Government nor the citizens of Botswana are willing to relinquish the power and influence that comes with owning livestock.

On the other hand, it may not be appropriate to judge Botswana too harshly, given the dramatic socio-economic changes that have taken place in that country relatively recently. Virtually overnight, Botswana went from one of the poorest colonies in the world, to one of the wealthiest independent African nations.³ It also went from a rural economy to an industrialised one. Despite this growth, a significant percentage of Botswana's population still lives in poverty.⁴ All of these factors have an effect on Botswana's environment and must be considered when assessing the state of Botswana's environmental legislation.

This paper will outline the evolution of environmental law in Botswana, beginning with an assessment of the current environmental situation in that country, followed by a summary of the various influences on Botswana's environmental development. Thereafter this paper will outline the environmental laws presently in force in Botswana and the problems therewith. Finally, this paper will comment on the efforts being made in Botswana to create a comprehensive environmental management system and the likely effectiveness of those efforts.

² Government of Botswana *National Policy on Natural Resources Conservation and Development* (Government Paper 1 of 1990).

³ Botswana declared its independence in 1966 and diamonds were discovered in 1967. This caused Botswana to have one of the fastest growing economies in the world. World Bank *Botswana: A Case Study of Economic Policy Prudence and Growth* (1999) 6-7.

⁴ It is estimated that approximately 50% of Botswana's urban population live in income poverty. World Bank Group *Botswana at a Glance* (2000) 1.

2. The State of Botswana's Environment

Botswana's environment is extremely fragile. This fragility is caused by a number of factors including:

- unpredictable rainfall;
- high temperatures;
- high evaporation rate;
- poor soil quality (84% of the country is covered in Kalahari sand);⁵
- over-cultivation and over-grazing of rangelands;
- unpredictable wildlife populations and migratory movements; and
- virtually no surface water in the country, with the exception of small areas of wetland which serve as the main focus for agriculture and fishing and a major source of water.⁶

These conditions have helped to create a number of environmental problems in Botswana, which are described below.

2.1 Water resources

Botswana's water supply is swiftly being depleted. The main reason for this is the rapidly growing population,⁷ an increase in urbanisation and the rapid growth of the industrial sector (particularly mining). As a result of this growing demand, Botswana's wetlands and other water sources are under threat.

⁵ P Granberg and J Parkinson (eds) *Botswana: Country Study and Norwegian Aid Review* (CHR Michelson Institute, Brent) (1988) 309.

⁶ Botswana's primary wetland areas are the Okavango Delta and the Chobe River system. For information about these areas, see C Breen, N Quinn and J Mander (eds) *Wetlands Conservation and Management in Southern Africa: Challenges and Opportunities* (1997) 58-63.

⁷ Botswana's population is growing at a rate of 3.4% per year, one of the highest in the world. However it has been suggested that this rate may decline due to the devastating effects caused by the AIDs pandemic. J McCullum 'Trends and Scenarios' *State of the Environment in Southern Africa* (1997) 296.

2.2 *Wildlife*

Botswana's wildlife population is also under threat. That threat comes from a number of sources including: drought, inadequate grazing areas, poor soil management, insensitive erection of veterinarian fencing,⁸ increased poaching of protected wildlife and uncontrolled hunting of other species.⁹

2.3 *Depletion of grasslands and veld products*

Livestock production is the third largest industry in Botswana. This fact, combined with the generally poor quality of the soil, has led to severe degradation of the grasslands, particularly in the northern and central parts of the country where the grazing is best. This has meant the loss of certain vegetation species, the encroachment of unwanted species, soil erosion and more rapid evaporation of water sources.¹⁰

These problems are exacerbated by the fact that certain veld products are being over-cultivated by the rural communities for use in food and medicine. No real efforts have been made to regulate this unsustainable use, again leading to the loss or depletion of certain species.¹¹

2.4 *Wood and forest conservation*

The demand for wood and wood products for domestic and commercial use is growing fast in Botswana. Unfortunately, harvesting has been largely uncontrolled so that forests are being rapidly consumed. This problem is compounded by the deforestation undertaken for human settlement and agricultural purposes.¹²

2.5 *Pollution*

While the current pollution problem in Botswana is comparatively small, it is increasing. One of the major sources of air and water pollution in Botswana is the mining industry, which is continuing to grow. In addition, rapid urbanisation and Botswana's growing population have

⁸ W Nadeau 'The Current Effect of the Northern Buffalo Fence on Local Wildlife Species' *CSA Botswana* (Autumn) (1997) 20.

⁹ Granberg et al op cit (n5) 314.

¹⁰ Breen et al op cit (n6) 62.

¹¹ Granberg et al op cit (n5) 313.

¹² *Ibid* 316.

raised the levels of air and water pollution, as well as pollution caused by improper waste disposal.¹³

While many of these environmental problems are addressed by Botswana's environmental legislation, the quality of those laws, as well as their enforcement, has generally been poor.

3. Influences on Environmental Law in Botswana

Like most countries, Botswana's environmental laws reflect various influences – both positive and negative. The following is a brief discussion of the main influences.

3.1 International conventions

Botswana has signed most of the major environmental conventions and treaties.¹⁴ In the past, these instruments had only limited impact on the form and content of Botswana's environmental laws. However, recent developments suggest that these instruments are having more impact than ever before.¹⁵

3.2 NGOs

Albeit relatively small and young, Botswana's environmental NGOs have traditionally played an important role in encouraging (some would say prodding) the development of environmental laws in that country. The most important of Botswana's environmental NGOs are:

¹³ *Ibid* 318.

¹⁴ Botswana is a party to the following international agreements:

- Convention on Wetlands of International Importance, Especially as Waterfowl Habitat (1971), as amended (the Ramsar Convention);
- Convention on International Trade in Endangered Species of Wild Fauna and Flora (1973) (CITES);
- Vienna Convention for the Protection of the Ozone Layer (1985);
- Montreal Protocol on Substances that Deplete the Ozone Layer (1985), as amended;
- Convention on the Control of Trans-boundary Movement of Hazardous Waste and their Disposal (1989) (the Basel Convention)
- Convention on Biological Diversity (1992);
- UN Convention on the Law of the Sea (1992);
- UN Framework Convention on Climate Change (1992) and
- Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa (1994).

¹⁵ The most recent example of this is in respect of wetlands conservation. Botswana is currently finalising its Wetlands Strategy in line with the requirements of the Ramsar Convention. For more information on that strategy, see text accompanying n180-n184.

- International Union for the Conservation of Nature (IUCN). IUCN has played a very important role in shaping Botswana's environmental laws. This is illustrated by the instrumental part it played in drafting the Strategy and in the Government's decision to scrap its plans to dredge the Okavango Delta.¹⁶
- Kalahari Conservation Society (KCS). KCS is a private organisation dedicated to environmental conservation and education in Botswana. Its aim is to promote better knowledge of Botswana's wildlife through environmental education, publicity and research. Although privately funded, KCS' independence has been put into question by some commentators, which may go some way to explaining why the country's environmental condition continues to decline.¹⁷
- There are several smaller environmental NGOs operating in Botswana including the Botswana Society, Conservation International, the Chobe Enclave Conservation Trust, the Chobe Wildlife Trust, Forestry Association of Botswana, Kuru Development Trust, the Okavango Peoples' Wildlife Trust, Somerlang Tikologo, to name a few.

The influence of environmental NGOs in Botswana is perhaps more limited than in other developing countries. This is because of the unique context in which they operate. This includes the fact that, as a wealthy developing nation, Botswana is in a position to dictate the conditions on which it will accept aid. This has had the effect of preventing NGOs from setting all the rules. Furthermore, Botswana's highly centralised government and powerful civil service keeps NGOs somewhat marginalised – limiting their role to one of commentator rather than collaborator. This marginalisation is compounded by the continued importance that community meetings (kgotlas) have in keeping the rural communities informed of environmental changes, thereby filling a informational role often served by environmental NGOs.¹⁸

¹⁶ The Government had planned to dredge parts of the Okavango Delta to provide more water and agricultural land. E Burman 'Botswana's NGOs' *Ecodecision* (Autumn, 1996) 2.

¹⁷ In his publication, *The Lomba Archives: Botswana Environmental Policies and Practices under Scrutiny* (1994) 24, D Williamson gives several examples of KCS' lack of independence from the Government. These include its decision to support the Government's plan to relocate the indigenous population from the Kalahari Desert (their traditional homeland). This was done in the face of protests from most of KCS' own members. See also R White 'Land Issues Paper' *Botswana NGO Support Programme Series No. 2* (2000) 86.

¹⁸ Burman op cit (n16) 2.

Having said that, it is generally accepted that there is scope for NGOs to play a much more active role in the future development of environmental policy in Botswana.¹⁹

3.3 *International Donors*

It is certainly true that international donors²⁰ have made huge financial and technical contributions to Botswana's environmental research and development.²¹ Unfortunately, the impact of these donations has not always been positive. For example, donors have inadvertently contributed to Botswana's environmental problems by making aid contingent on economic diversification. As a result Botswana has a growing industrial sector, with its concomitant environmental implications. Similarly, efforts by the European Union (EU) to promote Botswana's beef industry has encouraged the overgrazing of rangelands. Finally, Botswana has been accused of falsifying its environmental performance in order to secure contributions from foreign donors.²²

3.4 *Tourism*

Tourism is the second largest industry in Botswana, after mining. That fact should have an overall positive impact on Botswana's environment because tourists will pay a great deal of money to see Botswana's wildlife, which represents a real incentive towards conservation. Furthermore, tourists are increasingly demanding 'eco-tourism', i.e., that the facilities they use do little or no damage to the environment. This has had, and will continue to have, the beneficial effect of encouraging companies to develop tourist operations in a sustainable and environmentally friendly manner.

¹⁹ White op cit (n17) 86. See also Dr G Somolekae 'Future Roles of NGOs in Botswana' *Botswana NGO Support Programme Series No. 2* (2000) 47. For more information on the future role of environmental NGOs in Botswana, see text accompanying n188-n189.

²⁰ Donors include the Netherlands Development Organisation, USAID and United Nations Development Programme.

²¹ Over the years Botswana has received donations for a wide variety of environmental projects, such as the preservation of the wetlands area, conservation of wildlife populations, improvements for water collection, etc.

²² In the early 1990's Botswana was accused of persistently overestimating the amount of land it reserved for wildlife (claiming it to be 40% when the true number was about 17%) in order to avoid an investigation by the EU into its environmental performance. Williamson op cit (n17) 28.

On the other hand, as tourism continues to grow in Botswana more and more development is taking places in areas of environmental sensitivity, e.g., the remote regions of the Okavango Delta. Simply by its presence, tourism has a negative effect on nature through the construction of roads, buildings, airstrips, fences and the extraction of water and the disposal of waste and sewage. Tourists (and in particular hunters) also frighten the animals, causing disruption to their normal patterns of behaviour.

Finally by moving into areas traditionally used for hunting and gathering, tourism has also had another, less obvious impact on the environment. It has created animosity by the rural communities towards the conservationists who promote tourism as a form of sustainable development. This animosity has increased the indigenous population's willingness to reject and even subvert conservation programmes.²³

3.5 *Industrial Development*

Undoubtedly, Botswana's largest industry is mining. By its very nature, mining can have serious environmental implications, including deforestation, air and water pollution and soil erosion. Fortunately, the mining companies operating in Botswana tend to give the environment a high priority because of the attention given to that industry by international conservationists.

It is for this reason that the new, small industries moving into Botswana perhaps represent more of a threat to its environment. Botswana is currently pushing hard to diversify its economy, having recognised that minerals are finite. Therefore, it is doing everything it can to encourage other industries to move into the country, irrespective of the negative impacts that those developments may have on the environment. For example, a major car manufacturer set up operations in Botswana despite the fact that the country's pollution statutes fail to adequately safeguard the environment against the pollution caused by that industry. To make matters worse, that company has since gone out of business, leaving any lingering environmental problems for the country to resolve.

3.6 *Community Participation*

Traditionally the indigenous population of Botswana had a very special relationship with nature and the environment, using only those resources necessary for survival and only when they were

²³ *Ibid* 26.

at their most plentiful.²⁴ Unfortunately, this connection with the land is being lost as the indigenous population is forced to move off their rural land and into urban areas. Also, conservation is not a priority to the poor when every day is simply a struggle to survive.²⁵

Fortunately, there is a growing movement in Botswana to put control over nature back into the hands of the communities who understand it best and who are most affected by its development. These Community-Based Natural Resource Management programmes are being developed in Botswana to encourage the people on the ground to take an interest in their environment.²⁶

3.7 *Vision 2016 and NDP 8*

Vision 2016 is the Government of Botswana's policy statement for governing the country until the year 2016.²⁷ It sets out the goals for the country, which include the promotion of democracy, development, self-reliance and unity. These goals are to be implemented through a number of programmes, two of which are the promotion of sustainable development and the conservation of natural resources.

However, a full reading of Vision 2016 confirms that the country's primary goal is development. This is evidenced by the repeated calls for economic growth and diversification, a reduction in unemployment, the eradication of poverty, the realisation of economic independence, etc. While emphasising development is understandable in a developing nation, that emphasis must be tempered by the knowledge that Botswana's future development lies in tourism, which in turn relies on conservation and sustainable development.

In addition to Vision 2016, the Government produces a National Development Plan (NDP) every four years. NDPs outline the Government's development goals for that period. The current plan, NDP 8,²⁸ reconfirms Botswana's general commitment to sustainable management of its environment, as well as its commitment to growth. In NDP 8 the Government promises to

²⁴ P Takirambudde and M Forster *Review of the Environmental Provisions of Existing Legislation* (1990) 10.

²⁵ Williamson *op cit* (n17) 26.

²⁶ For more information on Community-Based Natural Resources Management, see the text accompanying n188-n190. See also C van der Jagt, T Gujudhur and F van Bussel 'Community Benefits through Community Based Natural Resources Management in Botswana' *CNBRM Support Programme Occasional Paper No. 2* (1999).

²⁷ '2016' represents the 50th anniversary of Botswana's independence.

²⁸ Republic of Botswana *National Development Plan 8, 1998-2002* Ministry of Finance and Development, (Gaborone) (1998).

prepare environmental policies on a number of issues, including poaching, soil erosion, overgrazing, indiscriminate waste disposal and water pollution. As we will see *infra*, steps have been taken to implement some of these policies, however, the others are still a long way off.

3.8 *Livestock*

Undoubtedly one of the biggest problems facing Botswana's environment is the livestock industry. The unfettered growth of that industry has led to overgrazing of land, wastage of water resources, deforestation and a reduction in certain wildlife populations. Despite this, the livestock industry continues to grow unabated in Botswana.

The Government has recognised the problems caused by the livestock industry and has taken some initial steps to encourage alternatives to livestock, such as wildlife farming and the improved care and maintenance of rangelands. Unfortunately, there is little evidence that livestock owners are willing to make these changes.²⁹

4. **Summary of Botswana's Environmental Legislation**

There are currently 25 environmental statutes in force in Botswana.³⁰ The most important of these are described below.

4.1 *The National Conservation Strategy*

In 1990 the Government of Botswana adopted the Strategy as the basis for Botswana's environmental policy for the future.³¹ The fundamental principles underlying the Strategy are to:

increase the effectiveness with which natural resources are used and managed, so that beneficial interactions are optimised and harmful environmental side-effects are minimised; and integrate the work of the many sectoral Ministries and

²⁹ For more information on the environmental problems caused by livestock overgrazing, see text accompanying n154-n157.

³⁰ Botswana's environmental statutes combine civil, criminal and administrative elements. For example, civil law principles underlie many of the environment management statutes. Administrative measures (e.g., licences, permits and consents) are used to regulate the use of natural resources. Finally, criminal sanctions are used to punish transgressions in an effort to change behaviour.

³¹ As the Strategy is merely a statement of Government policy, it does not have the force of law.

interest groups throughout Botswana, thereby improving the development of natural resources through conservation, and vice versa.³²

These principles are being pursued through a number of developmental and conservation strategies,³³ which in turn are being pursued by a wide range of programmes.³⁴

One of the most important programmes described in the Strategy is the introduction of new legislation and the improved enforcement of existing legislation.³⁵ In particular, that programme recommends:

- higher penalties for offenders, so that the punishment fits the crime;
- encouraging the participation of NGOs in enforcement;
- creating an extensive consultative framework whereby the agency empowered to implement the Strategy, the National Conservation Strategy (Co-ordinating) Agency (NCSA), would consult with all levels of Botswana's society and other governmental departments;
- promulgation of a National Conservation Act to supplant the Strategy; and
- improved implementation of existing environmental legislation through close liaison between the Government and other interested parties (including NGOs, the University of Botswana and the private sector).³⁶

Surprisingly, the Strategy suggests only minor changes to contents of some of the environmental laws in place at the time. This is true in spite of a contemporaneous report (commissioned by the

³² Section 2.1.

³³ The development strategies include: the development of new and sustainable uses for natural resources; the optimisation of natural resources use; diversification of the economy to promote new jobs; increased public education and participation in environmental issues; and improved links with neighbouring countries to conserve resources.

The conservation strategies include: the conservation of all main ecosystems and cultural resources; protection of endangered species; maintenance of renewable resources while also increasing their sustainable yields; controlling the depletion of exhaustible resources; the equitable distribution of income and rewards from conservation; restoration of degraded natural resources and the prevention and control of pollution. Section 2.2.

³⁴ These include programmes for economic incentives/disincentives, new legislation and improved enforcement, planning and administration, as well as improved education facilities and training. Section 4.7.

³⁵ Section 5.

³⁶ Section 4.9.

Government) which identified a whole range of problems with Botswana's environmental laws.³⁷ Given that, it is perhaps not surprising that very few changes have been to Botswana's environmental legislation in the 10+ years that the Strategy has been in force.

4.2 *Pollution control*

As there is no general prohibition against pollution in Botswana, one must piece together various statutes to determine that country's pollution control regime. Not surprisingly, this arrangement allows for substantial gaps in the application of the law.

4.2.1 Air Pollution

Air pollution is regulated almost exclusively by the Atmospheric Pollution (Prevention) Act³⁸ and its subsidiary legislation.³⁹ That Act obliges persons who operate in controlled areas to obtain consent before releasing pollutants into the air.⁴⁰ The term 'controlled areas' is narrowly defined to include only industrial areas. Therefore enforcing officers may only investigate harmful emissions coming from industrial premises carrying on industrial processes, which is odd given that there are only a few industrial areas in Botswana.⁴¹

The Act therefore fails to regulate pollution from non-industrial sources, such as motor vehicle emissions and emissions from waste incineration. It also fails to address pollution emanating from non-industrial premises, such as smoke from domestic premises. While it is true that the

³⁷ The following problems were identified by Takirambudde et al op cit (n24):

- lack of public and cross-sectoral consultation;
- poor/non-existent implementation of statutes;
- confused lines of authority
- fragmented legislation and lines of responsibility;
- rampant non-compliance;
- inadequate air and water pollution legislation;
- no legislation on solid waste disposal;
- elimination of 'dual grazing rights';
- undue reliance on criminal sanctions;
- absence of Environmental Impact Assessment legislation; and
- a need for environmental management agreements.

³⁸ Act 18 of 1971.

³⁹ The Declaration of Controlled Areas Order (SI 71 of 1972) and the Atmospheric Pollution (Prevention) (Declaration of Controlled Areas) Order (SI 109 of 1979).

⁴⁰ Section 8.

⁴¹ It was for this reason that this Act was described as having 'been imported into Botswana's law wholesale from another jurisdiction'. Takirambudde et al op cit (n24) 22.

Public Health Act⁴² does make it a nuisance to release pollutants from domestic chimneys, the threat of a nuisance action is not really an effective deterrent.

Neither the Act nor the existing regulations set ambient air quality standards or emission values. Also no record keeping or monitoring standards have been established in the regulations despite the fact that the Act calls therefor. While limits on vehicular emissions are being discussed, they are a long way from finalisation.⁴³

Given all these problems and deficiencies, it is not surprising that the air pollution legislation in Botswana is largely ignored.

4.2.2 Water Pollution

There is no specific law addressing water pollution in Botswana. Therefore, the regulation of water pollution is scattered and piecemeal.

The main water pollution laws are found in the Water Act⁴⁴ and the Water Regulations.⁴⁵ The Act contains a general prohibition against water pollution.⁴⁶ It defines 'pollution' broadly to include any discharge of any matter or substance likely to cause injury (directly or indirectly) to public health, livestock, animal life, fish, crops, orchards or gardens, or to any product which uses public water in its processing.⁴⁷

'Public waters' are also defined broadly to include:

all water flowing over the surface of the ground or contained in or flowing from any river, spring or stream or natural lake or pan or swamp or in or beneath a watercourse and all underground water made available by means of works...⁴⁸

Interestingly, this definition does not cover *all* groundwater, only groundwater made available through mechanical or physical means. This could be interpreted to mean that the Water Apportionment Board does not have power to regulate groundwater contaminated by pollutants

⁴² Act 44 of 1971.

⁴³ The NCSA is currently conducting consultation on vehicular emission regulations.

⁴⁴ Act 40 of 1967.

⁴⁵ SI 62 of 1968 and SI 112 of 1969.

⁴⁶ Section 36.

⁴⁷ Section 2.

⁴⁸ Section 2.

that leach into the ground naturally. While clearly unacceptable, nothing has been done to remedy this oversight in the 20+ years that the Act has been in force.

The Act also gives every landowner an unrestricted right of access to public waters for domestic purposes, and they may apply for a right to divert, dam, store, abstract, use or discharge effluent into those waters.⁴⁹ By failing to restrict the use and abstraction of water, the Act fails to acknowledge the scarcity of that resource, treating it as little more than a commodity for human consumption.

Although applications and grants of water rights are supposed to be regulated by the Water Regulations 1968,⁵⁰ those Regulations have been described as ‘largely irrelevant’ because they fail to impose any restrictions on the granting of water rights, and because they fail to establish any method for ensuring compliance.⁵¹

It was for all of these reasons that new water legislation was proposed in 1991. That new legislation would have repealed the existing Water Act (as well as the related Boreholes Act⁵² which permits the sinking of boreholes virtually without limit) and replaced it with two statutes: a new Water Act and the Water Supply and Sewerage Act.⁵³ The proposed statutes were drafted line with the notions of sustainable development and advocated:

- unity and coherence in the management of water and water resources;
- co-ordinated policy and decision-making for the management of water resources, with active participation from the community; and
- incorporating water management into Botswana’s overall resources management policy.⁵⁴

Unfortunately this new legislation remain dormant, despite calls for its enactment by the Government’s own consultants.⁵⁵

⁴⁹ Sections 5, 6 and 15.

⁵⁰ SI 62 1968.

⁵¹ Prof T Maluwa *The National Conservation Strategy Action Plan Consultancy Report* (5) (1998) 7.

⁵² Proclamation 62 of 1956.

⁵³ SMEC ‘Water Legislation’ *Botswana National Water Master Plan Study, Final Report* (11) (1992).

⁵⁴ Discussed in Maluwa op cit (n51) 36.

⁵⁵ *Ibid.*

There are other statutes that deal, obliquely, with water pollution. These include the Agricultural Resources Conservation Act⁵⁶ that permits the Agricultural Resources Board to institute works on agricultural land necessary to prevent the pollution of public waters. Also, the Fish Protection Act⁵⁷ makes it an offence to release harmful substances into public waters for the purposes of killing fish. Finally the Waterworks Act⁵⁸ makes it an offence to affect the quality of water supplied by water undertakings. Unfortunately, these laws (like the Water Act) are written in such weak and vague terms that they remain largely ignored in the battle against water pollution.

4.2.3 Waste Disposal and Pollution

The improper disposal of waste – and the pollution that it causes – is an endemic problem in Botswana. Until 1998 there was no legislation in Botswana that addressed this form of pollution. Fortunately, there have been two very important developments in this area recently.

First, the Agrochemicals Act was adopted in 1999.⁵⁹ When it comes into force, that Act will regulate the sale, use and disposal of agrochemicals in Botswana.⁶⁰ This will be done via a Registrar of Agrochemicals with assistance from the National Agrochemicals Committee. Those bodies shall be responsible for:

- establishing procedures for registering agrochemicals imported and/or used in Botswana;
- licensing all manufacturers and importers of agrochemicals; and
- establishing safe methods for disposing agrochemicals.

This Act will help Botswana control the use, importation and disposal of hazardous substances – areas that are currently unregulated.

Another major advance in the control of pollution is the Waste Management Act, which was adopted in 1998.⁶¹

⁵⁶ Act 39 of 1972.

⁵⁷ Act 42 of 1975.

⁵⁸ Act 26 of 1961.

⁵⁹ Act 18 of 1999.

⁶⁰ Section 2 defines 'agrochemicals' as any organic, inorganic or live biological material intended to promote, control or destroy animal or plant growth.

⁶¹ Act 15 of 1998. This Act implements the Basel Convention for Botswana.

That Act regulates the disposal and movement of waste in Botswana.⁶² It also imposes a duty on polluters and others to pay for the damage caused by unlawful waste disposal. It is enforced by the Department of Sanitation and Waste Management (DSWM); a new department in the Ministry of Lands and Housing. The responsibilities of the DSWM for waste management are numerous and broad,⁶³ with the most important being the preparation of a national Waste Management Plan that will identify the kind and quantity of waste produced throughout the country. That Plan will also identify approved waste disposal sites and prescribe appropriate waste disposal strategies and methods.⁶⁴ Furthermore, the Act obliges all waste carriers and waste management facilities to register with and secure a licence from the DSWM.⁶⁵

The Act gives the DSWM extensive power to enforce the provisions of this Act. This include the power to close any waste management facility that creates a risk of pollution or harm to human, animal or plant life, or to enter onto any land and take whatever action necessary to avert a risk of serious pollution.⁶⁶ Furthermore, if a person causes any damage through the deposit of any poisonous, noxious or polluting waste, he shall be liable to pay a fine and the cost of repairing that damage.⁶⁷

Under the Act, local authorities continue to be responsible for the collection and disposal of household waste, however now they must ensure that waste is disposed of at a licensed waste management facility. Local authorities are also empowered to require the *occupier* of land to clean up any illegally deposited waste – irrespective of who deposited it.⁶⁸

⁶² Section 2 of that Act defines ‘waste’ to include any substance (both hazardous and non-hazardous) that has been discarded by any person or which is made available for recycling.

⁶³ Those responsibilities are listed in Section 5 and include:

- developing policy to deal with sanitation and waste management;
- promoting cross-sectoral co-operation;
- encouraging communication among stakeholders;
- promoting sustainable development in waste management;
- promoting public health measures;
- promote human resources development within their own personnel; registering waste managers;
- registering and licensing waste carriers;
- regulating and monitoring the collection, disposal and treatment of waste; and
- instituting a consignment control system.

⁶⁴ Sections 9-10. At the time of writing this Plan was being finalised by the DSWM.

⁶⁵ Sections 12- 28.

⁶⁶ Section 26 and 41.

⁶⁷ Section 42. This is Botswana’s version of the ‘polluter pays’ principle.

⁶⁸ Sections 29 –32. On the other hand, local authorities are exempted from collecting waste that they deem ‘inaccessible or too expensive to collect’ because the waste is too small or in a remote location. That exemption could give local authorities an excuse for not performing their responsibilities under this Act.

The Act also imposes a duty of care on every person who produces, carries or disposes of waste 'to take all measures applicable to him in the circumstances to prevent the escape of any waste from his control and to prevent the contradiction' of the Act.⁶⁹ As this provision is written so broadly, it effectively imposes a duty of care on *any* person who deals with waste to ensure that they deal with it properly.⁷⁰ This duty of care is reinforced by the offence of littering – an innovation for Botswana.⁷¹

The Act gives the DSWM extensive power to investigate and prosecute offenders. This includes the power to lay charges against the officers and directors of a company if it can be shown that the offences of that company were committed with that person's consent or connivance.⁷² The imposition of personal liability on a company's senior officers has been proven to be an effective deterrent against environmental offences in other countries.⁷³

Although this Act is in force and the registration and licensing of waste disposal facilities is currently underway, it has not been used to prosecute polluters yet. This is because regulations have not been developed to implement it and because there are currently inadequate resources to enforce it properly.

Assuming for the sake of argument that regulations are developed and that adequate resources are made available for enforcement, the duties of care and liabilities created by this Act should be a powerful weapon in Botswana's fight against improper waste disposal and pollution. Hopefully this Act will serve as a model for future anti-pollution laws in Botswana.

4.3 *Conservation*

Botswana has a number of conservation statutes in force. However, like its pollution legislation, these statutes are often incomplete, overlapping and in some cases, ill-conceived.

Local authorities are also obliged (some time in the future) to identify and rehabilitate abandoned landfill sites in order to prevent further contamination (Section 55).

⁶⁹ Section 51.

⁷⁰ This provision is similar to the duty of care provisions in the UK's Environmental Protection Act 1990.

⁷¹ Section 34.

⁷² Section 52.

⁷³ This kind of provision is included in the UK's Environmental Protection Act 1990 and the Health and Safety at Work Act 1974.

4.3.1 Flora

There are a number of statutes that deal with the conservation of flora in Botswana. Unfortunately, these statutes are very old and as such not in keeping with the holistic approach of sustainable management that is advocated by the Strategy.

A good example of this is the Forest Act,⁷⁴ which represents Botswana's early effort to conserve its forests. That Act empowers the Minister of Agriculture to declare any state land a forest reserve.⁷⁵ Furthermore the Minister may restrict the use of certain trees or to declare any tree or class of tree protected, thus limiting its harvest and use.⁷⁶ If a person breaches these requirement he shall be guilty of an offence, punishable by a fine, imprisonment and/or payment of compensation equal to the value of the damage caused.⁷⁷

Unfortunately, this Act has had limited effect on reducing deforestation. There are several reasons for this. First, the Act only applies to designated State forests (so-called 'gazetted' forests), which account for only 1% of the forests in Botswana. In addition there has been rampant non-compliance with the Act (particularly by timber companies), which has rendered it essentially useless. This non-compliance is certainly exacerbated, if not actually encouraged, by the Act's sizeable loopholes. These include, for example, the right of *bona fide* travellers to fell and use protected trees without a licence. Residents may do this also, provided that they have the Government's consent.⁷⁸

In view of clauses like this, it is clear that the Forest Act does not satisfactorily address the growing problem of deforestation in the Botswana. That is why the Ministry of Agriculture has been instructed to prepare a new policy for forest conservation. When completed, that policy should encourage the sustainable use and development of Botswana's forests. Unfortunately, that policy is still being drafted and is not expected to come into force any time soon.⁷⁹

The Agricultural Resources Conservation Act⁸⁰ also deals with the conservation of 'agricultural resources', which is broadly defined to include all soil, water, vegetation and fauna. That Act

⁷⁴ Act 23 of 1968.

⁷⁵ Section 4.

⁷⁶ Sections 11-13.

⁷⁷ Sections 14 and 23.

⁷⁸ Section 17.

⁷⁹ This policy has been in the drafting stages for at least three years.

⁸⁰ Act 39 of 1972.

empowers the Agricultural Resources Board to take all steps necessary to conserve those resources.⁸¹ This includes the power to impose conservation orders on agricultural land to oblige the landowner or occupier to take appropriate steps to conserve the agricultural resources thereon.⁸² The Board can also impose stock control orders limiting the number and class of stock that can be kept on agricultural land.⁸³ Finally, the Act permits the Board to undertake any works it considers necessary to conserve agricultural resources on private land.⁸⁴

Despite these broad powers and functions, the Board has done little to protect agricultural flora or lands in Botswana. This is because only one minor set of regulations has been passed to implement this Act.⁸⁵ More importantly, the Act is not being enforced against the primary occupiers of agricultural land – mainly the largest livestock owners – who represent some of the wealthiest and most powerful people in the country.⁸⁶

Finally, there are a number of minor statutes in Botswana that regulate the use of vegetation.⁸⁷ Unfortunately these Acts do little more than designate certain vegetation to be pests requiring eradication from the country. These laws are dangerous, both because they fail to consider the ecological effects that eradication of this vegetation might have and because they fail to proscribe appropriate methods for eradication, leaving open the possibility that destructive methods will be used.

4.3.2 Wildlife

The most important wildlife conservation law in Botswana is the Wildlife Conservation and National Parks Act.⁸⁸ That Act represents Botswana's implementation of CITES and other wildlife conventions to which Botswana is a signatory.⁸⁹

⁸¹ Section 2.

⁸² The Board can order the cessation of all cultivation, grazing, deforestation, fencing, etc. Section 16.

⁸³ Section 19.

⁸⁴ Section 18.

⁸⁵ Namely the Agricultural Resources (Grapple Plant) Regulations (SI 69 and 104 of 1977), which prohibit the cutting or digging up of the grapple plant for any purpose other than medicinal purposes.

⁸⁶ For more information on the influence wielded by Botswana's livestock owners, see text accompanying n152-n162.

⁸⁷ These include the Aquatic Weeds (Control) Act (Act 46 of 1971); the Noxious Weeds Act (Proclamation 3 of 1916) and the Plant Diseases and Pests Act (Proclamation 19 of 1959).

⁸⁸ Act 28 of 1992.

⁸⁹ For a list of the international wildlife conventions to which Botswana is a party, see n14.

The Act seeks to conserve wildlife and their habitats in a number of ways. The first is by setting aside land for wildlife. In particular, the Act empowers the President to declare any public land (or private land donated to him) to be a national park, game reserve, wildlife management area or controlled hunting area. Once so designated, that land must be used in a manner conforming to the requirements of the Act.⁹⁰ The most important aspect of this scheme for wildlife conservation is the establishment of wildlife management areas, which are areas set aside exclusively to safeguard the wildlife that does not reside in national parks or game reserves.⁹¹

The Act also seeks to promote wildlife conservation by imposing bans or other limits on the hunting or capturing of certain protected species, and by placing quotas on hunting partially-protected species.⁹² Finally, the Act tries to encourage conservation through the development of wildlife game farms or ranches as a sustainable alternative to livestock production.⁹³ Unfortunately, these opportunities have not been widely adopted.

Any person who transgresses this Act will be guilty of an offence, punishable by a fine (ranging from 5000 – 50,000 Pula) and imprisonment for up to 10 years.⁹⁴ Those high penalties, combined with the Act's shifting of the burden of proof from the prosecution to the defence,⁹⁵ suggests that compliance should be high. Unfortunately, compliance is generally poor.

There are several reasons for this. These include the largely ineffective and limited enforcement of the Act by the Department of Wildlife and National Parks (DWNP). In addition, the Act's sizeable loopholes contribute to poor compliance. For example, the Act permits any landowner or occupier to kill any animal that he believes has caused or threatens to cause damage to his livestock, crops, water installations or fences.⁹⁶ These kills can take place without prior notice to the DWNP (the only notice they have to give is when they turn the carcass over to the DWNP).

⁹⁰ Section 2 prohibits all hunting in national parks. Section 15 permits hunting, animal capture, farms and/or residences in wildlife management areas, but only in accordance with the terms of a licence or permit. Section 16 confirms that controlled hunting areas are to be used exclusively for hunting, but only with a licence. Sections 26-30 outline the various hunting licences available, which include licences for birds, small game, single game or special game.

⁹¹ Wildlife management areas represent 22% of the Botswana's landmass.

⁹² Section 18 and Schedule 7.

⁹³ Section 24.

⁹⁴ Section 19.

⁹⁵ Normally it is the Prosecutor's burden in a criminal case to prove that the accused committed the crime. Therefore by shifting the burden of proof to the defendant, this Act makes it substantially easier to successfully prosecute poachers. Despite this, very few prosecutions have ever been brought under this Act.

⁹⁶ Section 46.

Similarly, Section 19 permits citizens of Botswana to kill non-protected animals for consumption without licences, provided that they are not in a national park or a game reserve.⁹⁷ Finally, the Act fails to prohibit the use of wildlife management areas for livestock grazing. As a result, these areas are currently overrun with livestock.

Another problem with the Act has been in terms of its implementation. Although the Act is supplemented by a number of statutory instruments, very few of them really promote conservation. An example of this is found in the recent National Parks and Game Reserve Regulations.⁹⁸ Those Regulations oblige the DWNP to prepare and enforce a management plan for every public game reserve/national park in Botswana.⁹⁹ Those plans must specify, at a minimum:

- the objectives of that national park/game reserve;
- zoning for resource management, physical development and community use areas within the park/reserve;¹⁰⁰
- identification of tourist facilities and activities, including the maximum number of motor vehicles, the type of tourist facilities (e.g., lodges, camp sites, etc.) and tourist activities (e.g., game drives, game walks, etc.) and
- the location and type of government facilities and staff provisions.¹⁰¹

Although the Regulations establish a number of administrative rules for national parks and game reserves,¹⁰² they fail to encourage sustainable development. For example, the Regulations fail to

⁹⁷ It is because of policies like this that Botswana is witnessing a dramatic decline in its wildlife population. For example, a recent study suggests that the lion population in the Makgadikgadi Pans Game Reserve has fallen from over 200 in 1980 to approximately 45 in 2000 because cattle farmers are systematically trapping and killing the lions they claim to be a threat to their livestock. G Hemson, 'Draft Report on the Lion Population in the Makgadikgadi Pans' (2000).

⁹⁸ SI 28 of 2000.

⁹⁹ Regulation 3.

¹⁰⁰ Unfortunately the terms 'resource management', 'physical development' and 'community use' are not defined in the Regulations. However, their use in context suggests that 'resources management' refer to the permissible changes in the soil, water, vegetation and animal populations in the park/reserve. 'Physical developments' refer to the development of roads, airfields, buildings, water works, sewage and litter facilities within the park/reserve. 'Community use zones' refer to the type and location of public areas.

¹⁰¹ Part IV.

¹⁰² Parts III and VI. These include the use of entry permits and fees, the use of boats, motor vehicles, the collection and use of firewood, archaeological and cultural sites, etc.

specify the quantity or quality of the tourist facilities that can be built or set any conservation rules for those areas.

On the other hand, the recently enacted Wildlife Conservation (Convention on International Trade in Endangered Species of Wild Flora and Fauna) (Amendment) Order and the Wildlife Conservation (Possession and Ownership of Elephant Tusks or Ivory) Regulations¹⁰³ represent sincere conservation efforts by Botswana. The former updates the list of protected animal species (in line with CITES) and the latter seeks to control the trade in ivory by requiring it to be registered and delivered to the DWNP. Given the newness of these statutes, there no data available yet on whether this legislation has been successful in reducing poaching.

The Fish Protection Act¹⁰⁴ also regulates wildlife conservation in Botswana. That Act prescribes the number of fish that can be caught in public waters, as well as the methods for catching them. Unfortunately, the DWNP has largely ignored this Act, having never produced regulations to implement it in the 25 years that it has been in force.¹⁰⁵

Botswana's most recent wildlife conservation enactment is the Ostrich Management Plan Policy.¹⁰⁶ That Policy treats ostrich as a valuable renewable resource that can be sustainably managed for both consumptive and non-consumptive purposes.¹⁰⁷ The Policy proposes that the ostrich population in Botswana be managed through controlled hunting and farming in line with a management plan to be prepared by the DWNP. That plan is to be updated regularly in line with information obtained through monitoring and research.¹⁰⁸

Clearly this Policy is an attempt to implement the notions of sustainable development contained in the Strategy and therefore represents a significant step forward for environmental legislation in Botswana.

¹⁰³ SI 28 of 1999 and SI 27 of 1999, respectively.

¹⁰⁴ Act 42 of 1975.

¹⁰⁵ It is generally agreed that the Fish Protection Act is out-dated. This is why the DWNP declared in 1998 that it would be replace it with new legislation that would treat fish as part of an eco-system rather than as an independent species. Maluwa op cit (n51) 38. Research suggests, however, that nothing has been done to effect this.

¹⁰⁶ Government of Botswana *The Ostrich Management Plan Policy* (Government Paper 1 of 1994).

¹⁰⁷ Section 2.

¹⁰⁸ Section 4.

4.3.3 Land Use

Botswana has several land use and land tenure laws that have an indirect affect on the environment. Rather than discussing them all, this section will focus only on those statutes with the most direct effect on the environment, namely the Town and Country Planning Act¹⁰⁹ and the Tribal Land Act.¹¹⁰

The Town and Country Planning Act regulates the development, subdivision and consolidation of land through development plans prepared by local authorities.¹¹¹ Development plans must be accompanied by policies for the protection of the physical environment, which can include, for example, a resource preservation order.¹¹²

Interestingly, those orders can be issued only when it appears expedient for the Local Authority to do so.¹¹³ Unfortunately, the term 'expedient' is not defined in the Act. Therefore, it is not clear whether the promotion of conservation or the prevention of environmental degradation would be considered an expedient reason to issue a preservation order. One tends to doubt it, given that the Act does not require enforcing authorities to consider the environmental impacts of a development before granting planning approval and because the Act permits a number of projects to proceed without planning approval, despite their obvious potential for damaging the environment.¹¹⁴

The other land use law that has had a substantial (negative) impact on the environment is the Tribal Land Act. That Act had the effect of transferring to 12 regional Land Boards all of the power customarily held by chiefs over tribal land.¹¹⁵ In addition, the Act guarantees every citizen

¹⁰⁹ Act 11 of 1977.

¹¹⁰ Act 54 of 1968. Other land use legislation with an impact on the environment includes the Land Control Act (Act 23 of 1975), the Industrial Development Act (Act 22 of 1968) and the State Land Act (Act 29 of 1966).

¹¹¹ Part III.

¹¹² Section 6.

¹¹³ Section 23.

¹¹⁴ For example, Schedule 1 of the Act permits the following facilities to be constructed in a designated mining area without planning approval: fuel storage tanks and depots, sewerage treatment facilities and cesspools. This is extremely surprising given the high risk that these projects represent for the environment if improperly constructed.

¹¹⁵ Section 3 of the Tribal Land Act. Under customary law every member of the tribe was entitled to land sufficient to meet the needs of his household, as well as a right of access to communal land for the purpose of grazing his cattle, to access water and to develop artificial water sources. These rights were heritable, but not transferable, except with consent. These rules remain largely unchanged by the Tribal Land Act, except that these rights have been made available to all citizens of Botswana, not just tribesmen. For more information on Botswana's customary laws, see White op cit (n17) 72.

the right to graze their livestock on communal land and to use the communal resources, without payment.¹¹⁶

In 1975 that Act was supplemented by the Tribal Grazing Land Policy (TGLP).¹¹⁷ That Policy entitles any citizen (who can afford it)¹¹⁸ to acquire a private lease over communal land for the purpose of ranching. Owing to a loophole in the TGLP, these leases are granted alongside the citizen's right to graze on the communal lands. As such, certain livestock owners possess 'dual grazing rights' that entitle them to graze their livestock on their leased land until it is depleted then to move their livestock onto communal land to graze. This practice has led to the serious degradation of communal land in Botswana, which accounts for 70% of all land.

Although the detrimental effects of dual grazing are well known, nothing has been done to redress its environmental impacts. There are those who suggest that this is because the TGLP benefits owners of the largest herds of livestock, who happen to be some of the most influential people in the Government of Botswana.¹¹⁹

4.4 *Enforcing Authorities*

Given all these laws, it is not surprising that a vast environmental bureaucracy has developed in Botswana – at all levels.

Ministries. There is no one Ministry devoted to the environment in Botswana. This means that most Ministries have some authority over the environment. The most important of these are the Ministry of Lands and Housing; the Ministry of Agriculture; the Ministry of Mineral Resources and Water Affairs and the Ministry of Commerce and Industry.

National Conservation Strategy (Co-ordinating) Agency. The NCSA was established in 1990 to implement the Strategy. The NCSA is housed in the Ministry of Lands and Housing, although it

¹¹⁶ While the intention is for all citizens to obtain access to communal land, the reality is that some groups – particularly the poorest and those from the marginalised tribes – are discriminated against in favour of the wealthy members of the dominate tribes. *Ibid* 78.

¹¹⁷ Government of Botswana *Tribal Grazing Land Policy* (Government Paper 1 of 1975).

¹¹⁸ Typically only the large livestock owners are wealthy enough to lease land.

¹¹⁹ Williamson op cit (n17) 14-15. For more information on the effects of the TGLP, see text accompanying n152-n162.

has connections to all the Ministries through its Environmental Liaison Officers. These Officers present the views of the NCSA whenever policy is made that might have an effect on the environment.

Unfortunately this arrangement has kept the NSCA's influence on environmental policy marginalised. It is for this reason that there are currently plans to transform the NCSA from an agency into a full-fledged government department, which would give it much greater influence over environmental policy.¹²⁰

Departments, Boards, Units. Within each of the Ministries there are a number of departments, boards and units that have certain responsibility for enforcing environmental legislation. For example in the Ministry of Agriculture, the Agricultural Resources Board and the Forestry Unit both have environmental responsibilities. In the Ministry of Commerce and Industry, the DWNP is the body primarily responsible for the protection and conservation of wildlife. In the Ministry of Lands and Housing, the NCSA has primary authority for environmental enforcement, while the DSWM is primarily responsible for waste management. In the Ministry of Local Government, the Tribal Land Boards, the Department of Town and Regional Planning and the Department of Local Administration also play part.

Local Authorities, Districts and Villages. Local authorities also have a great deal of authority to implement and enforce environmental legislation. District Councils also have the right to affect environmental conditions when they prepare their District Development Plans. Similarly Village Development Committees have some authority to control environmental development in their areas.

With all these bodies playing a part in managing the environment, it is not surprising that there is conflict and inefficiencies in the administration and enforcement of Botswana's environmental legislation, which is considered *infra*.

¹²⁰ For more information on the plans to change the NCSA into a government department, see text accompanying n172.

5. Comments on Botswana's Environmental Legislation

Botswana's environmental legislation and its administration is plagued by poor organisation, fragmentation, inadequate implementation, poor enforcement and rampant non-compliance. The following section outlines those problems and offers some explanations therefor.

5.1 *The National Conservation Strategy*

When it was adopted in 1990, the Strategy was heralded as being in the forefront of environmental conservation in Africa. Since then, however, the Strategy has been the subject of criticism, including that:

- there is insufficient local skill to implement it effectively (as demonstrated by the fact that very few of its recommendations have been implemented since it was adopted 10 years ago);
- the system it created is ineffective, as the NCSA lacks any real power to make environmental policy;
- it perpetuated a fragmented, uncoordinated and competitive institutional framework when it should have supplanted it; and
- the Government was simply paying lip-service to the international community when it adopted the Strategy.¹²¹

Despite these criticisms, very little was done to improve upon the Strategy until very recently.

In 1998 the NCSA released the National Conservation Strategy Action Plan (the Action Plan) which contains the NCSA's recommendations for implementing the Strategy.¹²² Volume 5 of that Plan contains a comprehensive review of Botswana's environmental legislation and recommendations for improvements thereto. Those recommendations include:

- promulgation of new environmental legislation on issues such as waste disposal, air pollution, water management, etc.;

¹²¹ S Monna *Strategies for Sustainability: Africa* (Earthscan Publications, London) (1997) 7.

¹²² The National Conservation Strategy (Co-ordinating) Agency *The National Conservation Strategy Action Plan Consultancy Report* (1-5) (1998). For information on the recommendations contained in Volumes 1-4 of the Action Plan see text accompanying n164-n167.

- re-evaluation of the existing land tenure laws that affect the environment;
- abolition of certain environmental policy, including the Forest Act, the TGLP and the Fish Protection Act;
- restructuring the environmental enforcement regime; and
- adoption of an environmental management statute.

While little has been done yet to realise these recommendations, the Action Plan does represent a significant step forward towards implementing the Strategy.

5.2 *Fragmentation/Overlap*

Perhaps the most persistent criticism about Botswana's environmental laws is that there are too many of them, which creates a system that is 'fragmented, uncoordinated, overlapping, expensive to administer and essentially ineffective'.¹²³

A good example of this fragmentation and lack of co-ordination is found in the Agricultural Resources Act. That Act gives the Agricultural Resources Board jurisdiction over all agricultural soil, water, vegetation and fauna. As such, this Board has jurisdiction to regulate parts of the environment that are also administered by a variety of other government departments, including the Department of Water, the DWNP, the District Councils and the Land Boards, to name a few. Another example is found in respect of wetlands, which are currently regulated by not less than 21 different laws, each with their own enforcing authority.

Incredibly, the Strategy failed to acknowledge this fragmentation.¹²⁴ Fortunately the Action Plan did – 10 years on – and proposed resolving it by adopting a National Conservation Strategy Act,

¹²³ Maluwa op cit (n51) 38. Maluwa suggests that there are so many environmental laws in Botswana because the legal system was developed slowly and in an *ad hoc* manner, providing specific remedies to individual environmental problems. This old-fashioned, species-specific approach to environmental management is being replaced in most countries by a system that recognises the inter-relationships between species and regulates them accordingly. *Ibid* 7. For more information on the effect that legislative fragmentation has on sustainable development, see E Bray 'Fragmentation of the Environment: Another Opportunity Lost for a Nationally Co-ordinated Approach' *South African Public Law* (10) (1995) 173-185.

¹²⁴ This is true despite the fact that fragmentation was identified as one of the worst problems with Botswana's environmental legislation in a report prepared for the Government in 1990. Takirambudde et al op cit (n24) 5

by converting the NCSA from an agency to a government department and by encouraging greater cross-sectoral co-operation and public consultation.¹²⁵

5.3 *Poor Implementation/Lack of Implementation*

Despite the fact that many of the Botswana's environmental laws have been on the books for over 40 years, some of them have either not been implemented or implementation has been inadequate. This is also true with Botswana's implementation of environmental conventions and treaties, which is often dilatory.

It has been suggested that Botswana's implementation problems derive from the fact that more than one department is responsible for administering most environmental issues.¹²⁶ For example, not less than four public bodies regulate the quality of Botswana's water: the Department of Public Health, the Water Apportionment Board, the Agricultural Resources Board and the Department of Mines. The administration of land use provides another example of jurisdictional overlap.¹²⁷

In one case, this overlap in authority was so egregious that the law had to set out procedures to deal with it. Until 1992 both the Fauna Conservation Act and the National Parks Act regulated wildlife conservation, although administered by different Ministries.¹²⁸ Those responsibilities overlapped so much that both Acts provided that when a Minister acted under one Act, he was not bound by the terms of the other Act. Given this potential for stepping on administrative toes, it is not surprising that some departments have exercised their authority sparingly – or not at all.

Even when statutes are implemented in Botswana, that implementation is often inadequate. An example of this is the very recent implementation of the National Parks and Game Reserve Regulations.¹²⁹ Those Regulations were meant to provide, among other things, details about the management of wildlife management areas. Unfortunately, the Regulations fail to prescribe any rules for operations in those areas. This is true despite repeated calls therefor given that wildlife

¹²⁵ Maluwa op cit (n51) 47-50. For more information on these proposals, see text accompanying n168-n172.

¹²⁶ Takirambudde et al op cit (n24) 5.

¹²⁷ The Land Boards are empowered by the Tribal Land Act to prepare plans for the use of communal land. The Town and Country Planning Act empowers District Councils to prepare plans for communal land in their districts. Finally, the Agricultural Resource Board has the power to set aside communal land for agricultural conservation.

¹²⁸ In 1992 these Acts were consolidated into the Wildlife Conservation and National Parks Act.

¹²⁹ SI 28 of 2000.

management areas are being used to graze livestock when they were intended for wildlife development only.

Another example of an inadequately implemented environmental law is the Town and Country Planning Act, which until recently only required development plans for urban areas. This means that development in rural areas was largely unplanned and haphazard. Finally, the Fish Protection Act has also been inadequately implemented, given that no regulations have ever been promulgated to restrict the number and method of catching fish in Botswana.¹³⁰

Finally, by failing to properly implement its legislation, the Government of Botswana has vested enforcing authorities with a great deal of power to make their own rules, set their own standards and reach whatever outcome they desire. This kind of bureaucratic discretion inevitably leads to conflict, inertia and sometimes, abuse of power.¹³¹ This is particularly true when there is no system in place to hold administrators accountable for their actions or failure to act.¹³²

5.4 *Non-compliance*

Another problem with Botswana's environmental regime is a persistent lack of compliance by its citizens.¹³³ Several reasons have been posited for this, including the laws' externality. Environmental laws are considered 'external' when they do not conform to the values and standards of the indigenous population. That being the case, those laws are more likely to be disregarded.¹³⁴

¹³⁰ This Act also illustrates another problem with many of Botswana's environmental laws, namely that they often adopt an anthropocentric tone, treating natural resources as commodities for human consumption. The Fish Protection Act conserves fish primarily to ensure an adequate supply for humans. Similarly, the Water Act treats water as a infinite, rather than finite resource. In both cases, Botswana's 'conservation' laws actually promote unsustainable use.

¹³¹ For a discussion on the problems created by administrative discretion in a developing country (India), see K Vibhute 'Environment, Development and the Law: the Indian Perspective' *Journal of Environmental Law* (1995) 137-148 at 145.

¹³² South Africa has tried to limit this potential for abuse by making it obligatory for administrators to take the environment into account when making development decisions. If they fail in that obligation, they can be held personally accountable.

¹³³ This is not to suggest that it is the custom of the indigenous population to abuse the environment. On the contrary, the traditional practices of the Tswana people actually worked to protect flora (e.g., by imposing seasonal taboos on felling trees in order to give the young trees time to mature) and fauna (e.g., by allowing certain species to be hunted only with the chief's permission).

¹³⁴ Takirambudde et al op cit (n24) 10-11

Examples of such external laws are not hard to find in Botswana. These include the laws that restrict the cultivation of animals and plants.¹³⁵ Those laws are generally ignored in rural communities that traditionally relied on hunting and gathering for their survival.¹³⁶ Similarly, large livestock owners consistently ignore laws restricting the grazing of their livestock. In both cases, the people do not think they are committing a crime when they break laws that they believe to be inappropriate.

This attitude is particularly common when the Government fails to offer viable alternatives to the prohibited activities.¹³⁷ For example, when the Government imposed restrictions on the hunting of certain species, it failed to consider what impact that law would have on rural communities that rely on meat to survive. As a result, many people choose to ignore this law and continue hunting whatever they can find.

Compounding this is the Government's persistent failure to communicate either the terms or purpose of its environmental laws with the communities most affected thereby.¹³⁸ It is now well accepted that people are more likely to comply with a law, and in particular an environmental law, if they are consulted on its terms.¹³⁹ While the Government of Botswana perhaps can be forgiven for failing to consult with the public when it promulgated environmental laws in the years immediately following independence,¹⁴⁰ there is no excuse for that today, particularly as the need for public consultation was recognised in the Strategy itself.¹⁴¹

These problems are symptomatic of another, larger problem in Botswana – a dominate central Government. Although on paper Botswana appears to have a decentralised environmental management structure,¹⁴² the truth is that most environmental policy is made by central Government and imposed on the lower levels. This structure has the effect of taking decision-

¹³⁵ E.g., the Wildlife Conservation and National Parks Act and the Agricultural Resources Act.

¹³⁶ Hunting was not regulated in Botswana until 1967. Granberg et al op cit (n5) 315.

¹³⁷ Takirambudde et al op cit (n24) 20-21.

¹³⁸ *Ibid* 12-14. This fact is illustrated by the 'command and control' posture adopted by many of Botswana's laws. Maluwa op cit (n51) 25-26.

¹³⁹ See e.g., J Moffet and F Bregha 'The Role of Law Reform in the Promotion of Sustainable Development' *Journal of Environmental Law and Practice* (1995) 11-12.

¹⁴⁰ When Botswana started drafting its own laws in 1966, it relied on the colonial model of legislation, which meant a very strong central Government, with little or no consultation at the local or community levels. As a result Botswana has a highly centralised government, in stark contrast to its traditional system which relied on extensive discussion and consultation within the tribes. Takirambudde et al op cit (n24) 14.

¹⁴¹ Section 7.1.

¹⁴² That structure incorporates the Central Government, district councils, local authorities and village authorities.

making power away from the people who are most affected by environmental policy and putting it in the hands of a small group of urban residents, with only a distant relationship to the land. Although some efforts are now being made to move away from this top-down structure, there is still a long way to go.¹⁴³

5.5 *Lack of Enforcement*

Despite persistent non-compliance, there is little or no enforcement of many of Botswana's environmental laws.

One of the reasons posited for this is that the agencies and authorities obliged to enforce conservation laws are also obliged to promote the development of natural resources – a classic case of putting the fox in charge of the hen house.¹⁴⁴ History has shown that when faced with a choice between resource conservation and development, enforcing authorities in developing countries tend to choose the latter.¹⁴⁵ This is particularly true when those authorities are understaffed, inexperienced and work in a vast country with a relatively poor infrastructure.¹⁴⁶

Reliance on inappropriate administrative controls has also helped to discourage enforcement in Botswana.¹⁴⁷ For example, the present system depends primarily on criminal sanctions to encourage compliance. However, criminal penalties alone have limited effectiveness in promoting conservation.¹⁴⁸ This is particularly true when the fines imposed are so low so as to make it cheaper to break the law than it is to comply – as is often the case in Botswana.¹⁴⁹

¹⁴³ For example, the Wildlife Conservation and National Parks Act encourages community consultation and participation in wildlife management. Also efforts are being made to promote Community-Based Resource Management programmes. For more information on those programmes see text accompanying n185-n187.

¹⁴⁴ For example, the Agricultural Resources Conservation Act obliges the Agriculture Resources Board to promote both the conservation of agricultural resources and the expansion of the livestock industry.

¹⁴⁵ Takirambudde et al op cit (n24) 16-17.

¹⁴⁶ For example, the DWNP is responsible for policing all wildlife areas in Botswana, which represents 39% of that vast country. That fact, combined with severe understaffing, has helped the DWNP to acquire one of the worst enforcement records in the country, evidenced by a steady rise in poaching, a decline in the number of certain protected species and the deterioration of Botswana's national parks.

¹⁴⁷ *Ibid* 18 and White op cit (n17) 76.

¹⁴⁸ For a general discussion on the ineffectiveness of criminal sanctions in the promotion of conservation, see N Guggenheim 'Beyond Regulation: Proactive Environmental Management' *South African Journal of Environmental Law and Practice* (1) (1995) 71-84.

¹⁴⁹ Fines for breaching older environmental laws (e.g. the Fish Protection Act, the Forest Act) range from 500 Pula to 1000 Pula/offence. However, recent legislation suggests that the Government has started to take cognisance of the need to raise penalty levels. This is illustrated by the Wildlife Conservation and National Parks Act that authorises fines up to 50,000 Pula and prison sentences of up to 10 years for killing

Licensing is also used extensively in Botswana to promote conservation. Licences are required to hunt, fish, fell trees, etc. Licensing has its own shortcomings, however. It is only truly effective when the loss of that licence will have a substantial impact on a person's ability to make a living.¹⁵⁰ The reverse is true in Botswana insofar as most hunting licences, for example, are issued to sport hunters who are not unduly harmed if they lose that licence. If, on the other hand, licences were required for citizens of Botswana to hunt non-protected species,¹⁵¹ one may find that licensing becomes a more effective method for controlling behaviour.

Finally, it is not likely that government employees are likely to vigorously enforce environmental laws when the biggest offenders are often the wealthiest and most powerful people in the country, as described *infra*.¹⁵²

5.6 Illustration

As previously mentioned, the deterioration of Botswana's rangelands is one of the country's biggest environmental problems. It is generally agreed that this problem is caused by over-grazing and poor soil management techniques.

Those problems are exacerbated by the application of the TGLP. That policy was an early attempt to conserve Botswana's rangelands by encouraging large livestock owners to take leases of communal land, fence it and graze their livestock thereon.¹⁵³ Unfortunately, the TGLP failed to impose any restrictions on the customary right that those individuals had to graze their livestock on communal property.¹⁵⁴ As a result when the grass on their leased land is depleted, these owners simply move their herds onto communal land to graze.

certain protected species. Similarly the recent Waste Management Act provides for high penalties (up to 14,000 Pula and/or 10 years in prison) if a person is found guilty of illegal dumping.

¹⁵⁰ Takirambudde et al op cit (n24) 17.

¹⁵¹ Section 19 of the Wildlife Conservation and National Parks Act permits citizens of Botswana to hunt without a licence provided that the game is not in a national park or game reserve.

¹⁵² It has been suggested that some of the largest cattle owners in Botswana hold some of the most powerful jobs in the Government's environmental bureaucracy. In one case, a Director of the DWNP acquired several cattle ranches while serving in that post. Williamson op cit (n17) 14.

¹⁵³ The TGLP was premised on the theory – popular at the time – that the best way to conserve natural resources was to privatise their use and control. This theory has now been rebuked, but the TGLP continues to apply without amendment. N Rozemeijer and C van der Jagt 'Community Based Natural Resource Management in Botswana: How community based is CBNRM in Botswana?' *CBNRM Support Programme Occasional Series No. 2* (2000) 4 (n2).

¹⁵⁴ For more information on the right of Botswana's citizens to graze their livestock on communal land, see n115.

This practice of 'dual-grazing' has had a number of disastrous effects for Botswana, including:

- extensive deterioration of grazing land, causing loss of flora, fauna and eco-systems;
- a dramatic rise in the number of cordon fences (erected without the benefit of any kind of environmental impact assessment), that have severely restricted the ability of wildlife to migrate and to find adequate food and water;¹⁵⁵
- an increased demand for water in remote areas of the country, leading to shortages elsewhere;
- small livestock owners being squeezed off communal lands by larger owners;¹⁵⁶ and
- victimisation of the smaller tribes (e.g., the BaKgalagadi, the BaLala and the Basarwa), that are moved off of their traditional hunting/gathering areas to make room for grazing.¹⁵⁷

The problems caused by dual grazing are well known. In fact, the continued use of the TGLP has been vigorously debated over the years, with numerous calls being made for its revocation.¹⁵⁸ Nevertheless little, if anything, is being done by the Government to restrict its use.

The reason for this is simple: livestock represents power and status in Botswana, as in many other African countries.¹⁵⁹ The more livestock a person owns, the wealthier and more powerful he is.¹⁶⁰

¹⁵⁵ In 1983 Williamson conducted a survey of wildebeest mortality at the Makgadikgadi Pans. That survey revealed that as many as 50,000 wildebeest died that year from starvation because of cordon fencing that prohibited them from migrating. Despite these results, the Government of Botswana publicly announced that only 2000 wildebeest had died. Williamson alleges that this was done in order to avoid the EU taking action against Botswana for its handling of wildlife matters. Williamson op cit (n17) 8. See also Nadeau op cit (n8) 20-21.

¹⁵⁶ In 1992 IUCN conducted a study of the effects of dual grazing rights. That study confirmed that 'only the larger livestock owners would be able to take up the opportunity (offered by the TGLP) to fence in communal areas. With extensive control of a small number of people, the grazing available to a majority of villagers would be severely limited'. T Scudder et al *The IUCN Review of the Southern Okavango Integrated Water Development Project* (IUCN, Gland) (1992), quoted in Williamson op cit (n17) 76.

¹⁵⁷ White suggests that communal land use laws have made it easier for Botswana's wealthy elite (read 'large livestock owners') to acquire large tracts of land for their exclusive use, at the expense of the poorer sectors of society. White op cit (n17) 76-77.

¹⁵⁸ See *Ibid* 30, Takirambudde et al op cit (n24) 33, Maluwa op cit (n51) 26 and Granberg et al op cit (n5) 323-325.

¹⁵⁹ Granberg et al op cit (n5) 323.

¹⁶⁰ This fact explains why Botswana has one of the lowest slaughter rates among the cattle producing nations and why it consistently fails to meet its cattle quota to the EU. See Maluwa op cit (n51) 15 and Williamson op cit (n17) 17.

Given this, it is not surprising that some of the largest livestock owners happen to be some of the most powerful people in the Government – a glaring conflict of interest.¹⁶¹

This unwillingness to change the *status quo* was recently reconfirmed by the Tribal Land (Amendment) Regulations.¹⁶² Those Regulations came into force in June 1999, just a few months after the NCSA published its Action Plan calling for the abolition of dual grazing rights. Incredibly, those Regulations fail to even mention the issue of dual grazing rights, focusing instead on the need for financial reports by the Land Boards.

With leadership like this, it is not particularly surprising that the Batswana people are not really interested in environmental conservation or their environmental laws. Hopefully this will change with the introduction of more modern, realistic and sustainable efforts to improve the environment, which are outlined *infra*.

6. Environmental Developments in Botswana

As the foregoing section demonstrates, Botswana lacks cohesive and comprehensive environmental laws and management systems. However, efforts are now being made to improve this situation – although progress is very slow.

The following is a brief description of those developments.¹⁶³

6.1 The National Conservation Strategy Action Plan

In 1998 Botswana conducted a comprehensive evaluation of its environmental management programmes and policies in its Action Plan.¹⁶⁴ While mention has already been made of Volume 5 of that Plan,¹⁶⁵ it is worth outlining the main recommendations made in Volumes 1-4.

¹⁶¹ In his discussion on livestock policy in Botswana, E Worby writes that 'an indigenous class of proto-type capitalist ranchers, largely represented by highly-paid civil servants and rural-based politicians, was prepared to use the agency of the state to grant itself exclusive title to grazing land'. E Worby 'Livestock Policy and Development Ideology in Botswana' *Power and Poverty Development and Development Projects in the Third World* (1988), quoted in Williamson op cit (n17) 23.

¹⁶² SI 74 of 1999.

¹⁶³ This section outlines both legal and extra-legal developments because Botswana has come to appreciate that legislation, although a critical tool in conservation, is not enough by itself. Instead legislation must underscore and work with management techniques to be successful. Tsaoko op cit (n1) 76-77.

¹⁶⁴ National Conservation Strategy (Co-ordinating) Agency op cit (n122).

¹⁶⁵ For more information on Volume 5 of the Action Plan, see text accompanying n122.

Volume 1 of the Action Plan examines the present policies, plans and administrative measures affecting environmental and natural resource conservation in Botswana. It recommends requiring policy-makers to consider conservation issues at all stages of project development, rather than relegating those issues to the later stages when it may be too late to redress the project's negative environmental effects. That Volume also recommends that cross-sectoral co-operation and co-ordination become mandatory policy for conservation issues and that the national accounting system be modified to recognise conservation performance.

Volume 2 of the Action Plan recommends the increased use of economic incentives and disincentives to encourage sustainable development. In particular, that Volume recommends charging for the use of natural resources; offering subsidies for improved environmental performance; reducing tax incentives to unsustainable industries and the elimination of dual grazing rights.¹⁶⁶

Volume 3 of the Plan outlines the use of Integrated Multi-sectoral Conservation Projects (IMCPs). IMCPs are aimed at creating employment in rural areas by introducing programmes for the sustainable use of natural resources. They are also designed to give rural communities ownership over their environment, thereby encouraging them to promote conservation efforts.

Volume 4 of the Action Plan outlines the efforts being made to promote environmental education in Botswana. The goals of the Environmental Education Plan¹⁶⁷ are to integrate environmental education into the national curriculum; promote public awareness and participation in environmental issues; provide environmental education for policy-makers and develop a better environmental education infrastructure.

As this brief summary demonstrates, the Action Plan recommends a number of sweeping, yet realistic, improvements to Botswana's environmental management system. Hopefully, the implementation of these recommendations will happen soon and they will have the effect of finally creating sustainable development in Botswana.

¹⁶⁶ Apparently the Ministry of Lands and Housing has begun preparing a new land use policy that will address a number of these issues, including dual grazing. However, as that project is only now being put out to tender, we are unlikely to see any progress on this issue for some time.

¹⁶⁷ National Conservation Strategy (Co-ordinating) Agency *Botswana Environmental Education Strategy* (1997) 2.

6.2 *National Conservation Strategy Act and National Conservation Department*

It has been recommended that the Strategy be transformed from a mere statement of environmental policy to a full-blown environmental statute to be known as the National Conservation Strategy Act.¹⁶⁸ That Act would:

- give legal force to the Strategy;
- reconfirm Botswana's environmental goals;
- empower the NCSA to develop its own environmental policy and to draft the laws necessary to implement those policies;
- require other departments to consult with the NCSA on environmental issues and to give due consideration to environmental issues during their planning; and
- give effect to Botswana's international obligations.¹⁶⁹

Although the Action Plan did offer a model National Conservation Strategy Act,¹⁷⁰ nothing was done to finalise it, until very recently.¹⁷¹

Related to this is the recommendation that the NCSA be converted from an agency to a Government department to be known as the National Conservation Strategy Department (the NCSD).¹⁷² That conversion would give the NCSD primary responsibility for the environment. It would also put the NCSD on equal footing with all other departments in terms of policy-making, making it necessary for other governments departments to consult with the NCSD on issues affecting the environment.

Surprisingly, it is the Government's plan to complete the conversion of the NCSA into the NCSD before the end of 2000, i.e., before promulgation of the National Conservation Strategy Act. That

¹⁶⁸ See Section 7.3 of the Strategy and Section 58 of the Action Plan.

¹⁶⁹ Maluwa op cit (n51) 47.

¹⁷⁰ Maluwa considered whether Botswana should include a right to the environment in its Constitution, like other developing nations (e.g., South Africa and India). However, he concludes that such a move would not be politically feasible inasmuch as it would 'almost inevitably invite debate on the desirability of including various other contested claims as entrenched constitutional rights, as well', something that the Government of Botswana is not interested in doing. *Ibid* 8.

¹⁷¹ In September 2000, the NCSA and the United Nations Development Programme invited tenders for drafting the Act.

¹⁷² Section 5.8 of the Action Plan.

arrangement may cause more problems for the Government than it solves because a department can not be formed out of thin air; legislation must in place to give it authority to make policy and implement programmes. As such, by creating the department before enacting the Act, the NCSD may be a 'department' in name only.

6.3 *Environmental Impact Assessment Legislation*

Several commentators – including the NCSA – have called on the Government to promulgate Environmental Impact Assessment (EIA) legislation.¹⁷³ That legislation would oblige all persons (both public and private)¹⁷⁴ to prepare a report of the likely environmental impacts of their projects when applying for planning approval. Advocates for EIA legislation in Botswana illustrate the need for it by pointing to the large number of veterinarian cordon fences that have been erected all over the country without environmental impact assessments – often with disastrous results.¹⁷⁵

Draft EIA legislation was produced in 1995 by the NCSA.¹⁷⁶ It incorporates the best of international EIA legislation and proposes that:

- EIAs be mandatory for certain types of projects;
- EIAs be prepared after consultation with all interested parties, including members of the public;
- the results of the EIA be incorporated into an Environmental Impact Statement (EIS) containing certain information;¹⁷⁷
- the EIS be assessed by all relevant departments and authorities, including the NCSA, and is to be made available to the public for inspection and comment;

¹⁷³ Section 7.3(c) of the Strategy. See also Takirambudde et al op cit (n24) 6 and Maluwa op cit (n51) 38.

¹⁷⁴ It is particularly important to impose this EIA obligation on the Government since it is one of the largest developers in the country and because private sector developers generally do EIAs for large projects as a matter of course.

¹⁷⁵ Williamson op cit (n17) 11. See also Nadeau op cit (n8) 20-21 and text accompanying n155.

¹⁷⁶ This draft is included in the National Conservation Strategy (Co-ordinating) Agency's *Report of the Workshop on the Environmental Impact Assessment Legislation* (1995).

¹⁷⁷ It was suggested that the EIS include the following information: a project description; a description of the likely environmental and socio-economic impacts of the project; an assessment of those impacts – both immediate and residual; possible alternative projects and a proposed monitoring scheme.

- it be mandatory for planning authorities to consider the EIS before deciding whether to grant planning approval; and
- the NCSA have authority to overrule planning approval if it is dissatisfied with the results of the EIA.

Despite the fact that this draft has been with the Government for over 5 years, no real progress has been made towards its adoption.¹⁷⁸ One can not help but wonder if these delays reflect unwillingness by some members of the Government to relinquish the uncomplicated and comfortable planning approval arrangements that currently exist.

6.4 *Wetlands Strategy*

Given the variety of laws and regulations in place in Botswana, it is rather surprising that none of them specifically protect the country's wetlands,¹⁷⁹ particularly when wetlands represent some of Botswana's most valuable, yet fragile habitats (e.g., the Okavango Delta, the Makgadikgadi Pans and the Chobe Enclave). This is also surprising given that Botswana has been a signatory to the Ramsar Convention since 1997.¹⁸⁰

Hopefully, all this is about to change. The NCSA recently produced a draft Wetlands Policy and Strategy (the Wetlands Strategy)¹⁸¹ that seeks to promote the sustainable development of Botswana's wetlands. That Strategy proposes a six-pronged programme to accomplish this, including the introduction of new wetland legislation.¹⁸² Despite this proposal, the draft fails to propose any legislation, or even to set a time frame for preparing such a draft. This is worrying given that the National Conservation Strategy Act is still not written, despite the fact that the Strategy recommended its adoption over 10 years ago.

¹⁷⁸ This draft has been in the Attorney General's office for the past 2 years.

¹⁷⁹ 'Wetlands' include areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salty. This definition is drawn from Article 1.1 of the Ramsar Convention.

¹⁸⁰ The Ramsar Convention obliges all members to prepare a policy for protecting their wetlands.

¹⁸¹ The National Conservation Strategy (Co-ordinating) Agency *Botswana Wetlands Policy and Strategy: Draft Prepared for National Wetlands Consultative Conference* (2000).

¹⁸² The other programmes suggested by the Wetlands Strategy are:

- implementation of wetland management policies;
- promoting public awareness and capacity building associated with wetlands;
- securing increased funding for research and development on wetlands issues;
- providing adequate funding for sustainable development of wetlands; and
- promoting regional and international efforts to conserve wetland areas.

Having said that, the DWNP is in the process of preparing a draft Wetlands Policy that is supposed to be delivered to Cabinet for approval by the end of 2000. Hopefully this means that a Wetlands statute is not far behind.¹⁸³

While these are undoubtedly big steps towards conserving Botswana's wetlands, there is still a long way to go. Given the critical importance of wetland areas for Botswana's future, one can not help but wonder what (or who) is causing these delays.¹⁸⁴

6.5 *Community-Based Natural Resource Management*

Community-based natural resource management programmes (CBNRM) seek to return management control over natural resource to the communities most affected thereby. It also seeks to redirect the benefits derived from resource management to the communities who pay the social cost of maintaining those resources. This is being done to encourage communities to take 'ownership' of the natural resources in their areas.¹⁸⁵

While not new to Botswana's environmental NGOs, the principles underlying CBNRM just now being accepted by the Government of Botswana. This is illustrated by the fact that in 1998 the DWNP prepared a draft CBNRM policy for wildlife conservation and in 1999 the Ministry of Agriculture prepared a draft CBNRM policy for conserving the forests, fish and veld products.¹⁸⁶ There are also indicators that other government departments are considering CBNRM policies (e.g., the Ministries of Land and Housing, Finance and Development Planning).¹⁸⁷

¹⁸³ Ironically the Wetlands Strategy suggests that any new wetland legislation be made 'compatible' with the wetlands laws currently in place – all 21 of them. That recommendation is contrary to the repeated calls for these old laws to be revoked and for environmental regulation to be streamlined. This suggests that the Government is unwilling to conduct the wholesale review and updating of its environmental legislation that is so desperately needed.

¹⁸⁴ It has been suggested that the Government's reluctance to prepare wetlands legislation (and to sign the World Heritage Convention) is prompted by its fear that this would restrict its ability to use those areas for development purposes. See, S Tvede and R Jansen 'Progress Report on the Implementation of the 1998 NGO Action Plan on the Environment' *Botswana NGO Support Programme Series No. 2* (2000) 21-38 at 37. Having said that, Botswana has listed the Okavango Delta on the Ramsar Register of 'Wetlands of International Importance', which at least requires implementation of a management plan for that area.

¹⁸⁵ White op cit (n17) 85.

¹⁸⁶ Unfortunately neither of these drafts were published because the Departments decided to prepare a joint CBNRM policy, which is due to be completed soon.

¹⁸⁷ Rozemeijer et al op cit (n153) 7. Hopefully, the Government will produce more than a policy on CBNRM, as policies have no legal force in Botswana and can not be enforced by the people who are affected thereby.

6.6 *Expanded role for NGOs*

As already mentioned, NGOs have traditionally played an important but limited role in promoting conservation in Botswana.¹⁸⁸ Nevertheless, it is generally agreed that this role has tremendous potential for growth.

Before that can happen, however, it has been suggested that Botswana's NGOs must take steps to resolve a number of fundamental structural and administrative deficiencies. These include the need to:

- be more democratic in their operations and in their dealings with one another;
- be more business-like in their approach by, for example, charging for their services thus relieving some of their financial burdens; and
- define their goals and purpose with greater precision.¹⁸⁹

Once these improvements are made, Botswana's NGOs are likely to represent an important tool in promoting conservation in that country.

6.7 *State of the Environment Review*

The Strategy calls for regular State of the Environment Reviews to assess the condition of Botswana's environment.¹⁹⁰ These Reviews are designed to pinpoint Botswana's environmental condition, the effectiveness of its conservation policies and areas requiring improvement.

Although these Reviews are supposed to have been prepared annually or biennially since 1990, none has ever been prepared. Fortunately, preparation of the first Review began in February 2000 and the report is expected soon. When completed, that Review will assist Botswana's legislators to determine whether its laws are effective in promoting sustainable development or if those laws are actually harmful to the environment.

¹⁸⁸ See text accompanying n16-n18.

¹⁸⁹ White op cit (n17) 87.

¹⁹⁰ Section 7.3(d) of the Strategy.

7. Conclusion

As the foregoing discussion suggests, Botswana's current environmental laws and management systems are deficient in many respects.

First, there seems to be no real commitment to the environment amongst Botswana's policy-makers. This is illustrated by the fact that almost no changes have been made to Botswana's environmental legislation or its systems in the past 10 years – despite many promises to the contrary. Furthermore the proposals that are made are often inadequate or inappropriate insofar as they tend to skim the surface of problems, address only minor environmental concerns, seek to retain rather than replace the existing system and are often borrowed wholesale from other jurisdictions.

There are a number of reasons that this attitude has developed, including the absence of any public accountability for environmental decisions, the national priority for development over conservation and substantial conflicts of interest. Compounding all of that is Botswana's fundamentally flawed environmental administration, which is overly centralised, fragmented, overlapping and idle.

The Government is not wholly to blame, however, given that their complacency is mirrored by the attitude of the citizens of Botswana. For the most part, Botswana's citizens refuse to accept that their behaviour has a direct impact on the environment or to make any sacrifices in their lifestyles to benefit the environment. Ironically this attitude is found at both ends of the socio-economic spectrum. On the one hand, the wealthy, urban population is consuming and wasting more and more, while the rural population continues to rely on survival methods that deplete scarce natural resources.

Another major problem for Botswana's environmental regime is the power possessed by the livestock industry. The short-sited and selfish attitudes of livestock owners are rapidly destroying Botswana's natural resources. To make matters worse, there is no evidence to suggest that any efforts are being made to control this problem, which is not surprising given that the country is run by some of the largest livestock owners.

On the other hand, this paper did outline a number of environmental programmes that are currently being considered by the Government of Botswana. Those include:

- increased public consultation and education on conservation programmes and initiatives;
- enlarging the role of the community in environmental decision-making;
- making cross-sectoral consultation and co-operation obligatory;
- increased use of economic incentives/disincentives and decreased reliance on criminal sanctions; and
- improved enforcement mechanisms, such as increased penalties, reversing the burden of proof and making company officers liable for the environmental crimes of their companies.

What concerns this author is that these programmes, albeit modern and forward-thinking, are simply being *considered* by the Government of Botswana – virtually no progress has been made towards their implementation. This is the same pattern that has been followed in Botswana for the past decade: environmental issues are considered and discussed for an extended period; a policy is issued and then nothing happens. One can not help but wonder if these new programmes are being used as a smokescreen to divert the attention of environmental NGOs, foreign donor agencies and the international community away from the fact that Botswana does very little to protect its environment.

It is not clear why the Government of Botswana would not want to promote conservation and sustainable development, given the benefits that those policies could bring to that country (e.g., increased economic diversification, improved prosperity, a better quality of life for its citizens). This attitude is particularly surprising given that Botswana currently has the financial resources to pay for those programmes – something most developing nations are not able to do.

While it is beyond the scope of this paper to speculate on the causes for this attitude, one does hope that Botswana is able to overcome its reluctance soon – before it is too late.

8. Bibliography

Books

Breen, C; Quinn, N and Mander, J (eds) *Wetlands Conservation and Management in Southern Africa: Challenges and Opportunities* (IUCN, Botswana) (1997).

Granberg, P and Parkinson, J (eds) *Botswana: Country Study and Norwegian Aid Review* (CHR Michelson Institute, Brent) (1988).

McCullum, J 'Trends and Scenarios' *State of the Environment in Southern Africa* (SARDC, IUCN and SADC, Harare) (1997).

Monna, S *Strategies for Sustainability: Africa* (Earthscan Publications, London) (1997).

Scudder, T; Manley, R; Coley, R; Davis, R; Green, J; Howard, G; Lowry, S; Martz, D; Rogers, P; Taylor, A; Turner, S; White, G and Wright, E *The IUCN Review of the Southern Okavango Integrated Water Development Project* (IUCN, Gland) (1992).

Other Publications

'Botswana Draft Wetlands Policy and Strategy' *Botswana NGO Support Programme Series No. 2* (IUCN, Botswana) (1998).

Bray, E 'Fragmentation of the Environment: Another Opportunity Lost for a Nationally Co-ordinated Approach' *South African Public Law* (10) (1995).

Burman, E 'Botswana's NGOs' *Ecodecision* (Autumn) (1996).

Guggenheim, N 'Beyond Regulation: Proactive Environmental Management' *South African Journal of Environmental Law and Practice* (1) (1995).

Hemson, G 'Draft Report on the Lion Population in the Makgadikgadi Pans' (unpublished) (2000).

Moffet, J and Bregha, F 'The Role of Law Reform in the Promotion of Sustainable Development' *Journal of Environmental Law and Practice* (1995).

Nadeau, W 'The Current Effect of the Northern Buffalo Fence on Local Wildlife Species' *CSA Botswana* (1997).

Rozemeijer, N and Van der Jagt, C 'Community Based Natural Resource Management in Botswana: How community based is CBNRM in Botswana?' *CBNRM Support Programme Occasional Series No. 2* (IUCN, Gaborone) (2000).

Somolekae, Dr G 'Future Roles of NGOs in Botswana' *Botswana NGO Support Programme Series No. 2* (IUCN, Gaborone) (2000).

Takirambudde, P and Forster, M *Review of the Environmental Provisions of Existing Legislation* (IUCN, Gaborone) (1990).

Tsaoko, S 'The Role of Law and Lawyers in National Development' *CILSA* (XI) (1978).

Tvede, S and Jansen, R 'Progress Report on the Implementation of the 1998 NGO Action Plan on the Environment' *Botswana NGO Support Programme Series No. 2* (IUCN, Gaborone) (2000).

Van der Jagt, C; Gujudhur, T and Van Bussel, F 'Community Benefits through Community Based Natural Resources Management in Botswana' *CNBRM Support Programme Occasional Paper No. 2* (IUCN, Gaborone) (1999).

Vibhute, K 'Environment, Development and the Law: the Indian Perspective' *Journal of Environmental Law* (1995).

White, R 'Land Issues Paper' *Botswana NGO Support Programme Series No. 2* (IUCN, Gaborone) (2000).

Williamson, D *The Lomba Archives: Botswana Environmental Policies and Practices Under Scrutiny* (The Ntsu Foundation, Johannesburg) (1994).

World Bank *Botswana at a Glance* (2000).

World Bank *Botswana: A Case Study of Economic Policy Prudence and Growth* (1999)

Government Reports

National Conservation Strategy (Co-ordinating) Agency *Environmental Education Strategy* (1997).

National Conservation Strategy (Co-ordinating) Agency *Report of the Workshop on the Environmental Assessment Legislation* (1995).

National Conservation Strategy (Co-ordinating) Agency *The National Conservation Strategy Action Plan Consultancy Report* (1-5) (1998).

Republic of Botswana *National Development Plan 8, 1998-2002* Ministry of Finance and Development (Gaborone) (1998).

SMEC 'Water Legislation' *Botswana National Water Master Plan Study, Final Report* (11) (1991).

Legislation

Statutes

Agricultural Resources Conservation (Act 39 of 1972, Cap. 35:06)

Agrochemicals (Act 18 of 1999)

Aquatic Weeds (Control) (Act 46 of 1971, Cap. 34:04)

Atmospheric Pollution (Prevention) (Act 18 of 1971, Cap. 65:03)

Boreholes (Proclamation 62 of 1956, Cap. 34:02)

Fish Protection (Act 42 of 1975, Cap. 38:05)

Forest (Act 23 of 1968, Cap. 38:04)

Industrial Development (Act 22 of 1968, Cap. 43:01)

Land Control (Act 23 of 1975, Cap. 32:11)

Noxious Weeds (Proclamation 3 of 1916, Cap. 35:04)

Plant Diseases and Pests (Proclamation 19 of 1959, Cap. 35:02)

Public Health (Act 44 of 1971, Cap. 63:01)

Town and Country Planning (Act 11 of 1977, Cap. 32:09)

Tribal Land (Act 54 of 1968, Cap. 32:02)

Waste Management (Act 15 of 1998)

Water (Act 23 of 1968, Cap. 34:01)

Waterworks (Act 26 of 1961, Cap. 34:03)

Wildlife Conservation and National Parks (Act 28 of 1992)

International Conventions

Basel Convention on the Control of Trans-boundary Movement of Hazardous Waste and Disposal (1989)

Convention on International Trade in Endangered Species of Wild Fauna and Flora (1973)

Convention on Wetlands of International Importance, Especially as Waterfowl Habitat (1971)

Statutory Instruments

Agricultural Resources (Grapple Plant) Regulations (1977)

Atmospheric Pollution (Prevention) (Declaration of Controlled Areas) Orders (1972 and 1979)

National Parks and Game Reserve Regulations (2000)

National Policy on Natural Resources Conservation and Development (1990)

Ostrich Management Plan Policy (1994)

Tribal Grazing Land Policy (1970)

Tribal Land (Amendment) Regulations (1999)

Tribal Land (Subordinate Land Boards) Regulations (1973 and 1984)

Tribal Land Regulations (1970, 1973, 1976, 1984 and 1985)

Water Regulations (1968 and 1969)

Wildlife Conservation (Convention on International Trade in Endangered Species of Wild Flora and Fauna) (Amendment) Order (1999)

Wildlife Conservation (Possession and Ownership of Elephant Tusks or Ivory) Regulations (1999)